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14414 - Updates to Department of Defense Acquisition Environment, Safety, and Occupational Health Policy and Guidance

Lori Hales

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Updates to Department of Defense (DoD) Acquisition Environment, Safety, and Occupational Health (ESOH) Policy and Guidance

- Background
- Joint Capabilities Integration and Development System (JCIDS) Changes
- Streamlining of the Systems Engineering Plan
- DoD Standard Practice for System Safety
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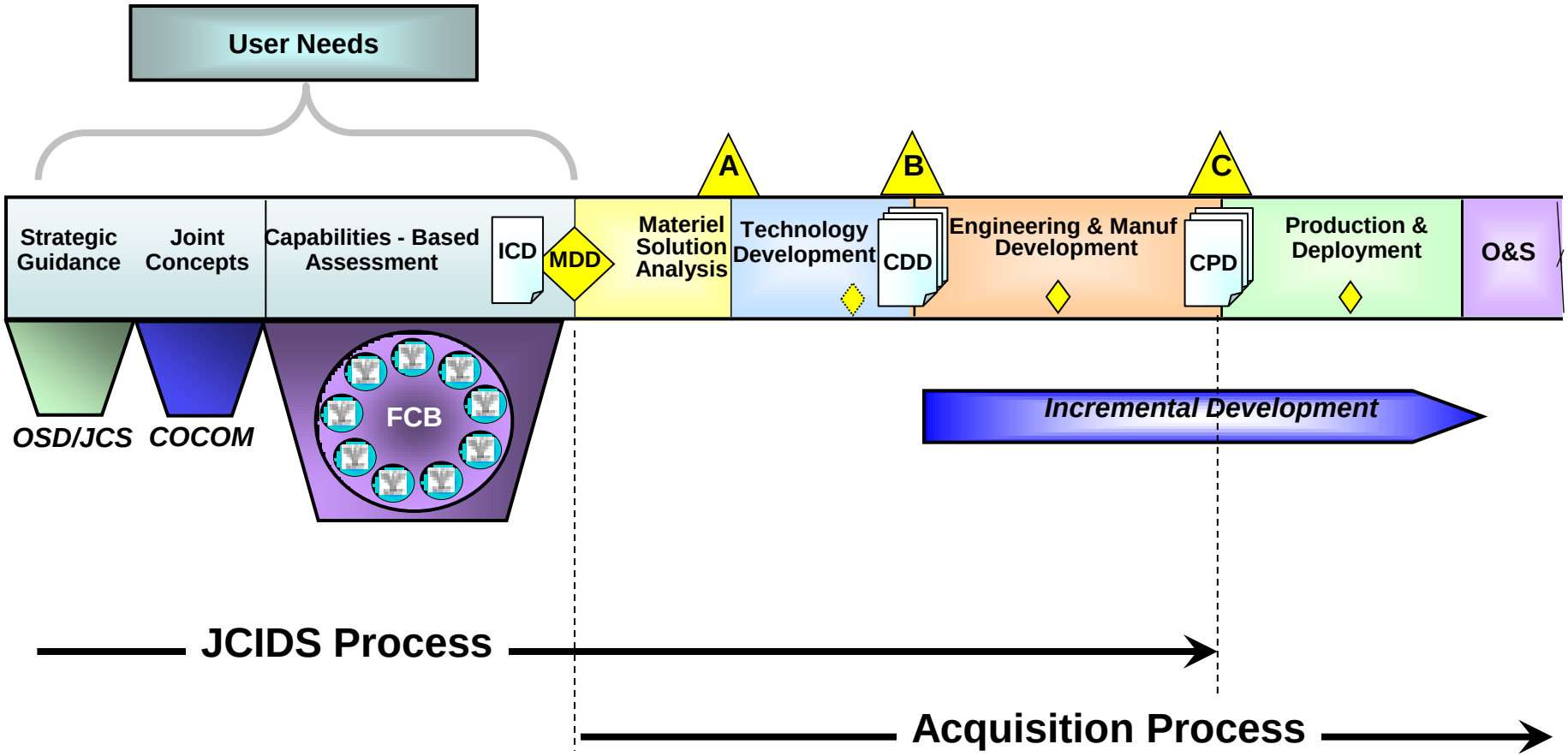
Background: Defense Acquisition Management System



Background: Goals of Acquisition ESOH

- Support the warfighter and DoD's mission
  - Prevent loss of life or serious injury to personnel
  - Avoid damage to facilities or equipment
  - Prevent harm to the environment and the surrounding community
  - Avoid system failures that negatively impact mission capability or operability
  - Reduce ESOH-driven life-cycle costs to operate, train, and maintain acquisition systems
  - Assure ability to operate world-wide in a global environment of increased ESOH regulation

Background: DoD Policy

- Acquisition
  - DoD Directive (DoDD) 5000.01, The Defense Acquisition System (May 12, 2003)
  - DoD Instruction (DoDI) 5000.02, Operation of the Defense Acquisition System (December 08, 2008)
  - Directive Technical Manual (DTM) 09-027 – Implementation of the Weapons Systems Acquisition Reform Act of 2009 (December 04, 2009 through Change 3, December 9, 2011)
  - DTM 11-003 – Reliability Analysis, Planning, Tracking, and Reporting (March 21, 2011 through Change 1, December 2, 2011)
  - Acquisition, Technology & Logistics (AT&L) Memo "Minimizing the Use of Hexavalent Chromium (Cr+6)" (April 8, 2009)
  - AT&L Memo "Document Streamlining – Program Strategies and Systems Engineering Plan" (April 20, 2011)
- Capabilities/Requirements
  - Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01H, Joint Capabilities Integration and Development System (January 10, 2012)
  - Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS) (January 19, 2012 with errata dated March 29, 2012)

Background: DoD Acquisition Guidance

- Acquisition
  - Defense Acquisition Guidebook, https://dag.dau.mil/
  - Acquisition Community Connection, ESOH Special Interest Area, https://acc.dau.mil/esoh
  - Training: “ESOH in Systems Engineering” Course (DAU Course Catalogue listing: CLE 009)
- Capabilities/Requirements
  - Training: “ESOH in JCIDS” Course (DAU Course Catalogue listing: CLR 030)

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JCIDS: What is it?

- JCIDS plays a key role in identifying the capabilities required by the warfighters.
  - Statutory responsibility of the Joint Requirements Oversight Council (JROC) is to validate joint warfighting requirements.
  - DoD acquisition and Planning, Programming, Budgeting, and Execution (PPBE) processes are supported.
  - System development is supported through initiating the definition of needed capabilities.
- Requirements traceability is key to success in system development.
  - JCIDS documents define what the warfighter needs.
  - Acquisition program offices translate those needs into technical requirements – system design, performance, and other specifications.
  - Requirements should be traceable back to JCIDS capability need or regulatory/policy driver.

JCIDS – Policy & Guidance Updates

- Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01H, Joint Capabilities Integration and Development System (January 10, 2012)
- Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS) (January 19, 2012 with errata dated March 29, 2012)
- Streamlined process
  - 50% reduction in timelines
  - Shorter document in length
- Six (6) mandatory Key Performance Parameters (KPPs) are formalized.
  - Force Protection, Survivability, Sustainment, Net-Ready, Training, and Energy
  - Energy KPP (eKPP)
    - Fuel and electric power demand considerations in systems
- Draft CDD is now required for Milestone (MS) A.
- New Urgent Operational Need (UON) document is established.

JCIDS – Policy & Guidance Updates (Cont.)

- DTM staffing requires Lead Service ESOH endorsement of JCIDS documents
  - Provide "Forcing Function" of ESOH SME participation in document development
- Continuous Learning Requirements (CLR) 030 “ESOH in JCIDS” Defense Acquisition University Online Module (April 2011)
- Defense Safety Oversight Council (DSOC) Initiative – Development of Handbook with ESOH & HSI Capability Statement examples (Starting in 2012)
  - All Types of Platforms
  - Initial Capability Document (ICD)
  - Capability Development Document (CDD)
  - Capability Production Document (CPD)

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Streamlining the Systems Engineering Plan (SEP)

- AT&L Memo “Document Streamlining – Program Strategies and Systems Engineering Plan” (April 20, 2012)
  - Streamlined and rationalized documentation
  - Delegated Programmatic ESOH Evaluation (PESHE) approval authority for ACAT 1 programs to Component Acquisition Executive
  - Removed PESHE Summary and National Environmental Policy Act (NEPA)/Executive Order 12114 Compliance Schedule from Acquisition Strategy
  - Mandated ESOH content in SEP, Table 4.6-1 Design Considerations
    - Cognizant Program Management Organization (i.e., who is responsible for ESOH)
    - ESOH Certifications
    - Hot link of PESHE and NEPA/EO 12114 Compliance Schedule
    - ESOH contractual language requirements
    - Description/Comments
  - Ensured all policy memos since last DoDI 5000.02 incorporated

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DoD Standard Practice for System Safety

- Updated to MIL-STD-882E
- Refined approach for identifying hazards, and assessing and mitigating associated risks encountered for life-cycle of the system
  - DoD strategic plans and goals supported
  - Basic elements of the system safety process clarified via organizational arrangement of information
  - Terminology clarified
- Emphasized identification of applicable technical requirements
- Identified additional task descriptions that may be specified in contracts
    - Hazardous Materials Management Plan
    - Functional Hazard Analysis
    - System of Systems Hazard Analysis
    - Environmental Hazard Analysis
- Increased dollar values for losses in severity descriptions
- Added software system safety techniques and practices

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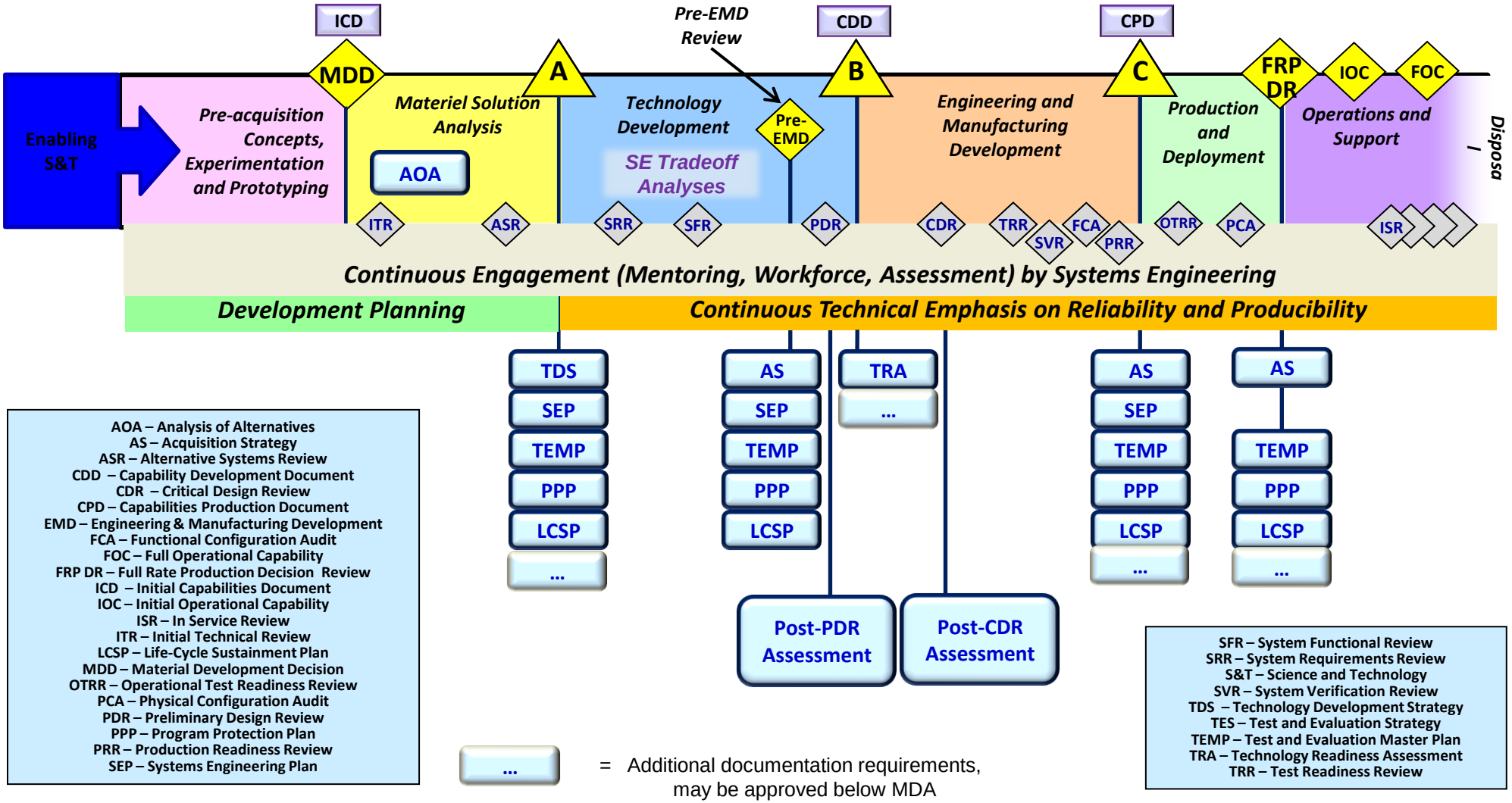
Defense Acquisition Guidebook (DAG)

- Provide consistent information and structure to meet needs of Program Managers and Systems Engineers
  - Acquisition Community Connection: More specific guidance on how to accomplish activities
- Eliminate “Vee” Charts
  - Replace with updated acquisition life-cycle process
  - Focus on what information, which activities, and what documents are needed at key points
- New DAG Chapter 4, Systems Engineering (SE)Framework
  - Introduction (Overview)
  - Systems Engineering Activities in the Life-Cycle
    - Description of key activities by each phase
    - Technical Reviews
    - Emerging Acquisition Models
  - Systems Engineering Processes
    - Description of each process
    - Design Considerations – ESOH resides in this Section
    - Specialty Engineering

Updated Acquisition Life Cycle "Weapon System Development"



AOA – Analysis of Alternatives
AS – Acquisition Strategy
ASR – Alternative Systems Review
CDD – Capability Development Document
CDR – Critical Design Review
CPD – Capabilities Production Document
EMD – Engineering & Manufacturing Development
FCA – Functional Configuration Audit
FOC – Full Operational Capability
FRP DR – Full Rate Production Decision Review
ICD – Initial Capabilities Document
IOC – Initial Operational Capability
ISR – In Service Review
ITR – Initial Technical Review
LCSP – Life-Cycle Sustainment Plan
MDD – Material Development Decision
OTRR – Operational Test Readiness Review
PCA – Physical Configuration Audit
PDR – Preliminary Design Review
PPP – Program Protection Plan
PRR – Production Readiness Review
SEP – Systems Engineering Plan

... = Additional documentation requirements, may be approved below MDA

SFR – System Functional Review
SRR – System Requirements Review
S&T – Science and Technology
SVR – System Verification Review
TDS – Technology Development Strategy
TES – Test and Evaluation Strategy
TEMP – Test and Evaluation Master Plan
TRA – Technology Readiness Assessment
TRR – Test Readiness Review

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Military Department Updates

- Air Force
  - Air Force Instruction (AFI) 63-101 – Acquisition and Sustainment Life Cycle Management (3 Aug 2011)
  - AFI 63-1201 - Life Cycle Systems Engineering (12 Sep 2011)
  - Air Force Pamphlet (AFPAM) 63-101 – Guide to Acquisition and Sustainment Lifecycle Management (5 Oct 2009)
  - Safety, Civil Engineering (Environmental Engineering), and Surgeon General AFIs

- Army
  - Regulation 70–1 Army Acquisition Policy (22 Jul 2011)

- Navy/Marine Corps
  - Secretary of the Navy Instruction (SECNAVINST) 5000.2E – Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System (1 Sep 2011)

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Summary

- DoDI 5000.02 update is planned for late 2012.
  - It will include frameworks for multiple system types: Weapon Systems (the traditional), Information Technology, Business, and Rapid Acquisition..
  - ODUSD(I&E) and the DoD ESOH Integrated Product Team will remain abreast of changes and will provide ESOH input..
- User ESOH SMEs participation in JCIDS process is critical.
  - Essential for successful integration of ESOH requirements in the SE process
  - ESOH in JCIDS DAU Module useful tool
    - Facilitates User ESOH SME understanding of how to effectively participate and develop capability needs

- Alignment of the PESHE document with the SEP provides greater visibility of ESOH requirements in SE.
- MIL-STD-882E clarifies system safety process for environmental use and facilitates applying ESOH analysis to system contract.
- Updated DAG will be current and easier to use.

Questions

- **Government Client**
  - **David Asiello**
  - **ODUSD(I&E)/ERS**
  - **Phone:(703) 604-1874**
  - **Email: david.asiello@osd.mil**

- **Government Client**
  - **Sherman Forbes**
  - **SAF/AQXA**
  - **Phone:(703) 254-2480**
  - **Email: sherman.forbes@pentagon.af.mil**

- **Presenter**
  - **Lori Hales**
  - **Booz Allen Hamilton**
  - **Phone: (850) 469-2507**
  - **E-Mail: hales_lori@bah.com**